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"The First Seven Years:

THE GRADUATE STUDENT IN PROFESSIONAL EDUCATION, 1952-1958,"

Prepared by
Board of Review,
Department of Education and Psychology

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Ernest J. Fuhs, Graduate Assistant

Iowa State Teachers College
Cedar Falls, Iowa

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The First Seven Years

THE GRADUATE STUDENT IN PROFESSIONAL EDUCATION, 1952-1958

Iowa State Teachers College

I. INTRODUCTION

The Beginning of the Graduate Program in 1952.

On the sixteenth day of May, 1950, the Iowa State Board of Education (now known as the Iowa State Board of Regents) entered into a contract with George D. Strayer for the conduct of a survey of the three institutions of higher education under the control of the Board. On October 19, 1950 George D. Strayer and his associates submitted the Report of a Survey of the Institutions of Higher Learning in the State of Iowa.

Under the heading of, "The State Teachers College is handicapped by the fact that it does not offer the Master's degree in education", the report states the following:

> Present State requirements permit certification of certain specialized types of school personnel at the Bachelor's level that under standards maintained by the better teacher education institutions of the nation require the master's degree. Thus special teachers of speech correction, teacher-librarians, elementary and high school principals may be certificated with only the Bachelor's degree. The State Teachers College, therefore, offers such programs at the Bachelor's level. This does not make for enhancement of its national reputation. Even though a new set of administrative regulations recently adopted by the State Board of Educational Examiners in Iowa will increase the numbers of hours of additional professional instruction required for the renewal of certain types of certificates for teachers and school administrators, the State Teachers College will still be handicapped as long as it is not permitted to offer the Master's degree in education. This additional instruction is not necessarily required to be for graduate credit, yet it is to be taken by persons who have already completed four years of undergraduate instruction, and consequently these persons will strongly prefer (and with good reason) that it should be available to them on the graduate level and for graduate credit.[1]

The section of the Strayer report entitled, "It is recommended that the State Teachers College be permitted to grant the Master's degree in education", states the following:

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[1]George D. Strayer and Arthur J. Klein, Report of a Survey of the Institutions of Higher Learning in the State of Iowa. Des Moines: State Board of Education of Iowa, 1950, pp. 31-32.

From practical standpoints as well as from the standpoint of the reputation of the institution, the survey staff is convinced that the State Teachers College should be permitted to grant the Master's degree in education. There is little reason for the State Board of Education or the State itself to take pride in the maintenance of a higher institution devoted exclusively to the professional education of teachers when, in fact, it is restricted to a level that prevents it from offering the degree that is recognized as the desirable professional standards by all distinguished teacher education institutions.

The quality and morale of the staff of the Teachers College cannot be maintained indefinitely if its work is limited to the Bachelor's level. Nor can it be expected that persons with the scholarly interests and ability to carry on desirable investigations in the field of teaching and education will be attracted to the College unless they have the stimulus and incentive of conducting and guiding the work of students for the Master's degree. These considerations will receive increased emphasis as competition for college personnel becomes more acute with the tremendous growth of public school attendance that will result during the next decade from the continuing high birth rates of the 1940's.

> These conclusions are reinforced by the fact that although Master's work for teachers is already available at the State University and, in particular fields, at the State College, it will be needed on so large a scale by teachers in service in the public schools of Iowa that it should be made available at three geographically distributed places in order to accommodate, at least to some extent, the teachers and prospective teachers in three regions who may be able to commute to the institutions from their homes within a radius of fifty miles or less. Teachers-in-service are generally modestly paid, and they are usually in restricted financial circumstances. The upgrading of their education is of immense importance in the public interest, but it entails severe personal sacrifices. These are mitigated by the accessibility of the desired instruction in low-fee state-supported institutions.
>
> The offering of instruction for teachers at the Master's level by the state Teachers College should not await the statutory raising of the standards of certification; it should precede and anticipate. It is a key factor in the whole forward movement of the entire public school system of the state. It is the point at which the state-supported system of higher education can contribute most to the improvement of the elementary and secondary schools.[2]

Immediately following the publication of the Strayer report, the faculty of Iowa State Teachers College began work on a proposal for a Master of Arts in Education degree at this institution. During the academic year, 1951-52, the in-

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[2]Ibid., pp. 32-33

stitution was granted permission to offer the Master of Arts in Education degree by the Board of Education (Regents). The graduate program was inaugurated in the Summer of 1952 with majors offered in the Department of Education (now known as the Department of Education and Psychology): Elementary Teaching, Elementary Principalship, Elementary Supervision and Secondary Principalship. Majors in other departments included those in Business Education, English, Mathematics, Science, Social Scien and Speech.

On March 10, 1953 the North Central Association of Colleges and Secondary Schools received the Self-Survey of the Iowa State Teachers College prepared by the staff of Iowa State Teachers College as a part of the preparation for approval by the association.

Provisional approval of the institution for graduate work leading to the Master's degree came about during the spring of 1953. (Final approval came following a visitation of a North Central Committee in 1955. Approval by the association was at that time dated back to 1952 when the graduate program began on the campus.)

Beginning with the summer of 1954 a major in Guidance and Counseling was added to the list of graduate majors in the Department of Education and Psychology. Majors added in other departments included those of Art and Music.

During the academic year of 1953-54 an inter-institutional sub-committee worked on the possibility of Iowa State Teachers College offering a major in school superintendency. A recommendation was made to The Committee on Educational Coordination (the inter-institutional committee) and subsequently the State Board of Regents approved the proposal. A major in school superintendency was offered for the first time by the college in the summer of 1955. Prior to this time the Department of Education and Psychology asked permission to reorganize the offerings in school administration and supervision under the following heading which is the existing pattern.

Major in School Administration and Supervision.

1. Emphasis in Elementary Principalship
2. Emphasis in Elementary Supervision
3. Emphasis in Secondary Principalship
4. Superintendency

A Master's degree in Industrial Arts was added to the graduate majors in the summer of 1956. No new graduate majors have been added since that date.

The Growth of the Program.

The first Master of Arts in Education degree from Iowa State Teachers College was granted in March 1953. The total number of degrees granted during each academic year has grown sporadically since that time, increasing rapidly from 12 degrees in 1953, to between 35-38 in the next four years, then jumping to a total of 78 in 1958. In contrast to this, the number of degrees in professional education has grown steadily from five in 1953 to 43 in 1958, from 35% of the total degrees granted during the first three years of the program to 55% of the total degrees during the last three years. The large increase in number of degrees granted in 1958 was probably due to the inception of the non-thesis option during the summer of 1958, and the practice of allowing changeovers from the earlier thesis requirement. In Table I may be found the number of degrees granted each year, 1953-1958 inclusive.

TABLE I

NUMBER OF MASTER'S DEGREES GRANTED BY YEAR, 1953-1958 INCLUSIVE

Year of Graduation	Total College	Dept. of Education and Psychology	
		Number	% of total
1953	12	5	42%
1954	35	11	31
1955	38	14	37
1956	37	18	49
1957	38	24	63
1958	78	43	55

Future Directions:

As standards for certification continue to move upward in Iowa as well as in other states, the graduate program in professional education at Iowa State Teachers College can be expected to grow steadily. Added impetus can be expected from the National Defense Education Act, particularly in Guidance and Counseling. Two other developments await action by appropriate committees at Iowa State Teachers College and inter-institutional approval; if acted upon favorably, they would in all likelihood result in increased graduate enrollment in professional education. One recommendation by the Department of Education and Psychology and approved by the Graduate Council, the Curriculum Committee and the Senate would expand the major in Elementary Teaching to include three areas of special education, and another recommendation would provide a two-year graduate program for the training of school superintendents. The action of the Iowa State Teachers College faculty in asking for removal of current restrictions on graduate work with eventual offering of the doctorate in professional education indicates another area for future direction, the vertical expansion of programs for teachers and specialized school personnel.

II. BACKGROUND OF THE MASTER'S DEGREE GRADUATE IN PROFESSIONAL EDUCATION

The Bachelor's Degree.

As could be expected, Iowa State Teachers College was the source of the bachelor's degree for a large proportion of the master's degree graduates. Approximately 70% of the total received the B.A. degree from Iowa State Teachers College, another 10% came from Upper Iowa University, Luther College, and the State University of Iowa, 10% came from other Iowa colleges, and the balance had received degrees from colleges and universities in 8 states, one insular possession (Panama) and two foreign countries (India and the Philippine Islands). The complete tabulation may be found in Table II.

TABLE II

SCHOOLS FROM WHICH IOWA STATE TEACHERS COLLEGE MASTER'S GRADUATES RECEIVED THEIR BACHELOR'S DEGREES

School	Number
Iowa State Teachers College	80
Upper Iowa University	4
State University of Iowa	3
Luther College	3
University of Hawaii	2
Wartburg College	2
St. Olaf College	2
Ohio State University	2
Westmar College	2
University of Wyoming	1
Iowa State College	1
Valparaiso University, Indiana	1
St. Ambrose College	1
Buena Vista	1
Maryknoll College, Quezon City, P.I.	1
Superior State College, Wisconsin	1
Drake University	1
Iowa Wesleyan College	1
Loras College	1
Muslim University, India	1
Colorado State College of Education	1
University of Panama	1
Missouri Valley College, Marshall, Missouri	1

Year B.A. Degree Received.

Approximately three-fourths of the master's degree graduates received the B.A. degree in the years 1948-1954 inclusive, and one-half of these completed the B.A. degree in 1950 or 1951, probably reflecting the post-war bulge in enrollments under the G.I. Bill. The year 1951 also marked the median year of completion of the B.A. degree, indicating that a large proportion of the graduate students pursued graduate work without any prolonged delay. The complete tabulation may be found in Table III.

TABLE III

YEARS IN WHICH MASTER'S DEGREE GRADUATES WITH MAJORS IN THE DEPARTMENT OF EDUCATION AND PSYCHOLOGY RECEIVED THE BACHELOR'S DEGREE.

Year	Supt.	Sec.Prin.	Elem.Prin.	Elem.Super.	Elem.Teach.	Guidance & Counseling	Total
1927					1		1
1928					1		1
1930						1	1
1933			1			1	2
1934			1				1
1936						1	1
1937			2				2
1939		1					1
1940		2		1			3
1941						1	1
1942		1					1
1944	1				1		2
1948	1	3					4
1949	2	5	1	2			10
1950	3	10	7		2	2	24
1951	6	8	2	1	1	2	20
1952		7	1	2	1		11
1953	2	1	3	1	1	3	11
1954	1	2	2		2	4	11
1955	1		1			1	3
1956					1	1	2
1957				1			1
Total	17	40	21	8*	11	17	114*

* One student from India not recorded.

Undergraduate Major.

Social Science and Physical Education were the most common undergraduate majors of the master's degree graduates, accounting for almost one-third of the majors listed. Elementary education (including Kindergarten-Primary) accounted for approximately 11% and Junior High Education plus Elementary totaled 20% of the majors. Grouping by major fields rather than by discrete majors is perhaps more significant, and reveals a somewhat different pattern, with Education (including Junior High School Education, Elementary and Secondary Education) leading the fields, with Social Science (including History, Economics and Sociology) a close second, followed by Physical Education and Science. Education, Social Science and Physical Education account for 60% of the total, with the balance scattered in eight fields. Table IV contains the complete tabulation.

TABLE IV

DISTRIBUTION OF MAJOR AND MINOR AREAS OF UNDERGRADUATE STUDY

Majors	No.	Minors	No.
A. Grouping by Discrete Major:			
Social Science	19	English	28
Physical Education	18	Biology	25
Junior High Education	11	Mathematics	19
Elementary Education	9	History	19
Mathematics	9	Social Science	16
English	5	Science	7
General Science	5	Speech	7
Business Education	5	Economics	7
Music	5	Education	7
Kindergarten-Primary	4	Earth Science	7
History	4	Physics	6
Speech	3	Industrial Arts	6
Business Administration	3	Physical Education	6
Earth Science	2	Business Education	5
Industrial Arts	2	Safety Education	5
Biology	2	Chemistry	4
Library Science	2	Agriculture	4
Physics	2	Driver Education	4
Education	2	French	3
Botany	1	Government	2
Sociology	1	Sociology	2
Economics	1	Special Education	2
Spanish	1	Art	2
Secondary Education	1	Zoology	1
		Vocational Education	1
		German	1
		Business	1
		Music	1
	117*		198
B. Grouping by Major Field:			
Education	27		
Social Science	25		
Physical Education	18		
Science	12		
Mathematics	9		
English and Speech	8		
Business Education and Business Administration	8		
Music	5		
Industrial Arts	2		
Library Science	2		
Spanish	1		
	117*		

* Some students graduated with double majors.

Graduate Transfer Credit.

Thirty-nine students were granted transfer credit from other institutions to meet part of the requirements for the master's degree at Iowa State Teachers College. Nineteen (almost 50%) students used credit from the State University of Iowa and Drake University, the other 20 students transferred graduate credit from 13 colleges and universities in the continental United States and from abroad. The complete list of institutions and hours of graduate credit transferred can be found in Table V.

TABLE V

GRADUATE HOURS TRANSFERRED FROM OTHER INSTITUTIONS

School	Over 12	10-11	8-9	6-7	4-5	2-3	
1. State University of Iowa	1		5	4	2		12
2. Drake University				1	2	4	7
3. Iowa State College						3	3
4. University of Colorado			1		1	1	3
5. Columbia University					1	1	2
6. Northwestern University				2			2
7. Ohio State University			1		1		2
8. Colorado State College of Education						1	1
9. Mankato State College						1	1
10. Michigan State University					1		1
11. Muslim University, India	1						1
12. San Francisco State College						1	1
13. University of Chicago						1	1
14. University of Hawaii					1		1
15. University of Minnesota			1				1
Total students	2		8	7	9	13	39

Teaching Experience.

A tabulation was made of the number of years of teaching experience at the time of attaining the master's degree. The number of years of teaching experience varied from 1 to 30 or more with a median of 6. Apparently the majority of graduate students who received the master's degree decided quite soon after receiving the B.A. degree to continue on for graduate work and attended summer sessions quite regularly. It is interesting to note, however, the number of exceptions to this pattern, since almost one-third of graduate students had 10 years or more of teaching experience at the time of receiving the master's degree. Table VI contains the complete tabulation.

TABLE VI

YEARS OF TEACHING EXPERIENCE AT THE TIME OF ATTAINING THE MASTER'S DEGREE

Years of Experience	Majors						
	Supt.	Sec. Prin.	Elem. Prin.	Elem. Super.	Elem. Teaching	Guidance and Counseling	Total
1 - 2	3	5	1			3	12
3 - 4	1	5	4		1	3	14
5 - 6	8	13	2	1	1	3	28
7 - 8	3	9	6	1		3	22
9 - 10	1		1			1	3
11 - 12		1		2			3
13 - 14		1	1				2
15 - 16		1				1	2
17 - 18		2		3			5
19 - 20	1	1					2
21 - 22			2				2
23 - 24				1	1		2
25 - 26			1			1	2
27 - 28					1	1	2
29 or more			2		2	1	5
							106*

* Data not available for a complete tabulation

Teaching Position.

A survey was made of the type of teaching position held at the time of receiving the master's degree, the results are tabulated in Tables VII and VIII. It should be noted that students with backgrounds in secondary education outnumber elementary teachers almost two to one. This could be expected to change as certification requirements for elementary teachers are raised. To date, the majority of elementary teachers are engaged in the process of earning the bachelor's degree.

TABLE VII

POSITION HELD AT THE TIME OF RECEIVNG THE MASTER'S DEGREE

	Supt.	Sec. Prin.	Elem. Prin.	Elem. Super.	Elem. Teach.	Guidance and Counseling	Total
Rural			1		1	1	3
Elem. Teacher		1	13	5	4	3	26
Elem. Principal		1	8	2		1	12
H.S. Teacher	12	21	7	1	1	9	51
H.S. Principal	2	17	2				21
Superintendent	3						3
College Teacher		1	1			1	3
							119*

* Same individual may be recorded more than once, for example, as a teacher and as a principal.

TABLE VIII

TEACHING POSITIONS HELD BY HIGH SCHOOL TEACHERS AT THE TIME OF RECEIVING THE MASTER'S DEGREE.

	Supt.	Sec. Prin.	Elem. Prin.	Elem. Super.	Elem. Teach.	Guidance and Counseling	Total
Mathematics	7	12	4	1		1	25
Social Science	2	14	3			6	25
English, Speech	6	9	3			6	24
Science	5	13	2			2	22
Phys.Educ.and Coaching	2	9				1	12
Business Education	1	2			1	1	5
Driver Training		2				2	4
Industrial Arts	1	3					4
Music	1	2	1				4
Counseling		1				2	3
Agriculture	1	1					2
							130*

* Same individual may be recorded more than once.

III. PERFORMANCE AT IOWA STATE TEACHERS COLLEGE

Test Scores.

All graduate students are required to take two sets of examinations: the Miller Analogies, utilizing vocabulary to test academic aptitude and standardized for graduate students; and the General Professional Examination, consisting of test items from the following four areas:

1. Child Development
2. Teaching and Learning
3. Organization and Administration
4. School in Society

Percentile ranks have been established for graduate students at Iowa State Teachers College. Results of the examination are utilized in determining admission to candidacy for a graduate degree and for guidance in course selection. Tables IX and X contain a summary of the results of these tests for students that have been granted the master's degree, classified according to professional area of emphasis.

Apart from an apparent dearth of students in the bottom two deciles of percentile ranks on the Miller Analogies test, it is difficult to determine a consistent pattern. Most striking perhaps, is the fact that there is an almost equal distribution in each of the top four quintiles of the Miller Analogies test. Ranking in the lowest quintile apparently either rules out acceptance as a candidate for a degree and/or inhibits the attaining of a degree, since only six people from the lowest quintile on the Miller Analogies test have received the master's degree, and two of these were foreign students for whom a language handicap would substantially depress the Miller Analogies score. It appears that a graduate student that ranks in anything except the lowest quintile on the Miller Analogies has sufficient academic aptitude to attain the master's degree, and that factors other than academic aptitude become more important in determining

attainment of the master's degree.

Scores on the General Professional Examination, however, do exhibit a pattern, a strong tendency for the master's degree graduates to score in the top deciles, and evidencing a fairly consistent decrease in frequency in the lower deciles. The observed distribution by quintiles differs significantly from either a proportional or normal distribution.

TABLE IX

TEST PERFORMANCE AT IOWA STATE TEACHERS COLLEGE
MILLER ANALOGIES TEST

Deciles	Supt.	Sec. Prin.	Elem.Prin.	Elem.Super.	Elem. Teach.	Guidance and Counseling	Summary Deciles	Summary Quintiles
90 - 99	1	2	2	2	3	2	12	28
80 - 89	2	7	3	1		3	16	
70 - 79	1	5	4	1	1	2	14	25
60 - 69	2	3	1	2		3	11	
50 - 59	3	5	2		1	2	13	27
40 - 49	2	7	3		1	1	14	
30 - 39	5	4	2	1	1	1	14	29
20 - 29	1	6	2	1	3	2	15	
10 - 19		1				1	2	6
0 - 9			2	1	1		4	
	17	40	21	9	11	17	115	115

TABLE X

TEST PERFORMANCE AT IOWA STATE TEACHERS COLLEGE
GENERAL PROFESSIONAL EXAMINATION
SHOWING PART I, II, III, IV AND TOTAL

Deciles	Supt. I	II	III	IV	T	Sec. Prin. I	II	III	IV	T	Elem. Prin. I	II	III	IV	T	Elem. Sup. I	II	III	IV	T	Elem. Tchr. I	II	III	IV	T	Guidance and Counseling I	II	III	IV	T	Summary Deciles	Quintiles
90 - 99	2	2	3	2	3	7	7	9	6	9	3	9	6	5	6	3	2	3	2	4	3	4		1	2	4	4	6	4	3	27	52
80 - 89	2	1	3	2	1	6	11	10	9	12	7	2	4	1	4	1	2	2	1		2		1	2	2	3		4	4	6	25	
70 - 79	1	1	1	2	2	5	6	4	3	6	3	2	3	2	2		1		1		1	1		1	2	1	1	2	3	1	13	25
60 - 69	3	4	2	2	2	8		6	6	2	3	1	1	4	4	1			1				6	1	1	1	9	2	2	3	12	
50 - 59	3	3	1	2	2	5	2	5	5	3	2	3	2	1	3	1		1		1	1	2			1	4			1	3	13	23
40 - 49		1	2	2	3	1	5	2	6	4	1	2	2	4	1	1	1		1	1		1		1		1	1			1	10	
30 - 39	1	3	2	1	1	3	5		3	3						1	1					2	2		1	1	1	2	2		9	9
20 - 29	5	1	2	1	2	2	2	4	2	1	2		1	2		1	1	2		1	2		2	2		2	1	1	1		4	
10 - 19			1	2	1	2	1					1		2	1		1	1	2	1				1	1						4	6
0 - 9		1		1		1	1					1	2						1	1	2	1		2	1						2	
					17					40					21					9					11					17	115	115

Courses taken at Iowa State Teachers College.

Since Education Research is the only all-college requirement it could be expected to head the list of courses taken. Students have a choice of Philosophy of Education or Advanced Educational Psychology. Majors in the Department of Education and Psychology selected Philosophy of Education in the approximate ratio of 4 to 3. Courses in school administration rank near the top of the list, followed by courses in guidance and counseling, curriculum, and educational services. Advanced Laboratory Practice heads the list of course selections outside of the department, followed by School Laws of Iowa and courses in sociology. One rather disturbing item was the relatively low ranking given to Statistical Methods in Education and Psychology, ranking 35th out of the 82 courses listed. Some of the students may, however, have had statistics included in the undergraduate program. History of Education was selected by only three students; it has been offered infrequently because of dearth of takers. Table XI contains the complete listing by major in the department, and tables XII through XVII the listing by discrete major.

TABLE XI

COURSES TAKEN BY STUDENTS WITH A MAJOR IN THE DEPARTMENT OF EDUCATION AND PSYCHOLOGY

	Cr. No. S	Cr. No. Q	Cr. Name	Total	S.Pr.	El.Pr.	Sup.	G.& C.	E.T.	E.S.
21:	294	604	Educational Research	115	40	21	17	17	11	9
	299	620	Thesis	99	34	15	17	12	11	9
	234	684	Philosophy of Educ.	80	29	15	15	9	8	3
	245	677	Admin. of Elem. Sch.	71	22	17	17	4	3	8
	275	676	Admin. of Sec. Sch.	59	33	2	16	7		1
	231	624	Sch. and Community Rel.	58	23	12	11	6	2	4
	235	675	Prin. of Sch. Admin.	57	23	7	17	5	4	1
20:	214	613	Adv. Ed. Psy	57	16	13	5	10	7	6
21:	182	583	Intro. to Guid. & Couns.	49	17	5	6	13	5	3
28:	250	650	Adv. Lab. Practice	45	12	15	3	7	4	4
20:	286	617	Analysis of the Individual	43	16	6	3	17	2	
21:	243	632	Curr. Elem. Sch. Child.	40	13	10	6	1	6	4
	141	570	Elem. Sch. Super. I	39	9	15	6	1	2	6
		558	Mental Tests	32	9	6	3	9	4	1
	288	618	Org. & Adm. of Guid. Prog.	32	11	3	3	15		
	138	584	Educ. & Occup. Info.	30	10	3		16	1	
	287	619	Tech. of Couns.	30	10	2	1	13	4	1
	272	631	Curr. Devel. Sec. Sch.	30	18		11	1		

Cr. No.	Cr. Name	Total	S.Pr.	El.Pr.	Sup.	G.& C.	E.T.	E.S.
S Q								
21: 237 679	School Finance	30	11	12	6	1		
94: 145 542	School Laws of Iowa	25	12	5	7	1		
21: 185 544	The Exceptional Child	25	8	6	3	3	4	1
133 533	Sec. Ed. Workshop	22	5	1	10	2	1	2
181 555	Educ. Evaluation	22	4	8		7	2	1
20: 108 508	Personality Growth of Child.	21	4	6	2	4	4	1
21: 239 585	Pupil Personnel Serv.	20	8	5	2	1	1	3
148 550	Parent Education	18	4	3	4	3	2	2
271 572	Sec. Sch. Super.	18	11	1	5	1		
241 614	Elem. Sch. Super. II	17	1	2	4		4	6
20: 112 512	Mental Hygiene	17	5	4	1	5	2	
21: 178 568	The Junior High Sch.	15	9	1	2	2	1	
131 580	Audio-Visual Ed.	15	5	3	2	2	2	1
132 574	Materials of Instruction	14	6	4	2			2
186 505	The Retarded Child	12	3	4		2	1	2
147 538	Remedial Reading	12		5	1	1	2	3
180 525	Stat. Meth. in Ed. and Psy.	11	1	3	1	4	2	
556	Clinical Experience	9	1	1		5	2	
249 681	Seminar in Elem. Ed.	9		3	2		2	2
146 536	Read. & Lang. Arts II	8	2	1		1	2	1
279 680	Seminar in Sec. Ed.	8	3	1	4			
98: 153 572	Crime and Delinquency	8	4	1	1	1	1	
683	Seminar in Sociology	7	3	2			1	1
21: 187 507	The Gifted Child	7		1	1	2	3	1
142 534	Meth. in Elem. Science	7		4	1		1	1
30: 132 518	Directing Safety Prog.	7	6	1				
96: 170 518	Russia	6	3	1			1	1
20: 100 515	Child Psychology	5	1	1	1		2	
140 520	Social Psychology	5	2	1	1	1		
285 658	Individual Intell. Testing	5		1		3	1	
60: 275 670	Art Projects	5		2			2	1
98: 156 573	Gen. Anthropology	5	3		1		1	
21: 188 509	The Physically Hand.	5		1	1		1	2
143 541	Soc. St. in Elem. Sch.	5				1	3	1
94: 681	Seminar in Govt.	5	4		1			
82: 118 518	Phys. Sci. for Elem. Gr. II	4	1	1			2	
87: 147 564	Geography of S. Amer.	4	2	1			1	
98: 119 568	Population	4	4					
157 575	Minority Group Relations	4	2			2		
20: 116 516	Psy. of Adolescence	3				1		2
21: 503	Problems of Teachers	3	1			1	1	
134 588	History of Ed.	3	2					1
37: 110 507	Sch. Health Problems	3	2				1	
82: 691	Sem. in Sci. Teaching	3	2					1
90: 285	Individual Readings	3	1			1	1	
92: 115 554	Corp. Finance and Invest.	3	3					
94: 131 532	State and Local Govt.	3		1	1		1	
98: 173 577	The Community	3	2	1				
21: 145 543	Story Telling	2					2	
172 562	Prob. in Read. in Sec. Sch.	2		2				
610	Field Study	2						2
38: 170 574	Curr. In Phys. Educ.	2	1			1		

	Cr. No. S	Cr. No. Q	Cr. Name	Total	S.Pr.	El.Pr.	Sup.	G.& C.	E.T.	E.S.
60:	150	417	Adv. Ceramics	2		2				
	191	509	The Art of Children	2		1			1	
	240	684	Art Forms	2		1			1	
80:	172	506	Fund. of Stat. Methods	2	1			1		
	134	523	Teaching of Arith. II	2		1			1	
	138	534	Eval. in Elem. Arith.	2		1			1	
	185	585	Clinical Pract. in Arith.	2					1	1
	235	691	Prob. in Teach. Arith.	2		2				
	290	692	Prob. in Teach. J.H. Math.	2	2					
87:	180	561	Meteorology	2	1		1			
	149	570	Geography of Europe	2	1				1	
98:	119	568	The Family	2	2					

TABLE XII

COURSES TAKEN BY MAJORS IN
SCHOOL ADMINISTRATION AND SUPERVISION: SUPERINTENDENCY

	Cr. No. S	Cr. No. Q	Cr. Name	Total
21:	294	604	Educational Research	17
	299	620	Thesis	17
	245	677	Administration of Elementary School	17
	235	675	Principles of School Administration	17
	275	676	Administration of Secondary School	16
	234	684	Philosophy of Education	15
	231	624	School and Community Relations	11
	272	631	Curriculum Development in the Sec. School	11
	133	533	Secondary Education Workshop	10
94:	145	542	School Laws of Iowa	7
21:	182	583	Intr. to Guidance and Counseling	6
	243	632	Curriculum of Elementary School Child	6
	141	570	Elementary School Supervision I	6
	237	679	School Finance	6
20:	214	613	Advanced Educational Psychology	5
21:	271	572	Secondary School Supervision	5
	148	550	Parent Education	4
	241	614	Elementary School Supervision II	4
	279	680	Seminar in Secondary Education	4
28:	250	650	Adv. Lab. Practice	3
21:		558	Mental Tests	3
20:	286	617	Analysis of the Individual	3
	288	618	Organization and Admin. of Guid. Program	3
	185	544	The Exceptional Child	3
	239	585	Pupil Personnel Service	2
	178	568	The Junior High School	2
	131	580	Audio-Visual Education	2
	132	574	Materials of Instruction	2
	249	681	Seminar in Elementary Education	2
20:	108	508	Personality Growth of the Child	2

TABLE XIII

COURSES TAKEN BY MAJORS IN
SCHOOL ADMINISTRATION AND SUPERVISION: SECONDARY PRINCIPALSHIP

Cr. S	Cr. No. Q	Cr. Name	Total
21: 294	604	Educational Research	40
299	620	Thesis	34
275	676	Administration of Secondary School	33
234	684	Philosophy of Education	29
231	624	School and Community Relations	23
235	675	Principles of School Administration	23
245	677	Administration of Elementary School	22
272	631	Curriculum Development of Secondary School	18
182	583	Introduction to Guidance and Counseling	17
20: 286	617	Analysis of the Individual	16
214	613	Advanced Educational Psychology	16
21: 243	632	Curriculum of Elementary School Child.	13
28: 250	650	Advanced Laboratory Practice	12
94: 145	542	School Laws of Iowa	12
21: 288	618	Org. and Adm. of Guidance Program	11
237	679	School Finance	11
271	572	Secondary School Supervision	11
138	584	Educational and Occupational Information	10
287	619	Techniques of Counseling	10
141	570	Elementary School Supervision I	9
	558	Mental Testing	9
178	568	The Junior High School	9
185	544	The Exceptional Child	8
239	585	Pupil Personnel Service	8
132	574	Materials of Instruction	6
30: 132	518	Directing Safety Program	6
21: 133	533	Secondary Educational Workshop	5
20: 112	512	Mental Hygiene	5
21: 131	580	Audio-Visual Education	5
181	555	Educational Evaluation	4
20: 108	508	Personality Growth of Child	4
21: 148	550	Parent Education	4
98: 153	572	Crime and Delinquency	4
94:	681	Seminar in Government	4
98: 119	568	Population	4
21: 186	505	The Retarded Child	3
279	680	Seminar in Secondary Education	3
98:	683	Seminar in Sociology	3
98: 156	573	General Anthropology	3
96: 170	518	Russia	3
92: 115	554	Corp. Finance and Investment	3
21: 146	536	Read. and Lang. Arts II	2
20: 140	520	Social Psychology	2
87: 147	564	Geography of South America	2
98: 157	575	Minority Group Relations	2
21: 134	588	History of Education	2
37: 110	507	School Health Problems	2
82:	691	Seminar in Science Teaching	2
98: 173	577	The Community	2
80: 290	690	Problems in Teaching Junior High Mathematics	2
98: 119	568	The Family	2

TABLE XIV

COURSES TAKEN BY MAJORS IN
SCHOOL ADMINISTRATION AND SUPERVISION: ELEMENTARY PRINCIPAL

Cr.	No. S	No. Q	Cr. Name	Total
21:	294	604	Educational Research	17
	245	677	Administration of Elementary School	17
	299	620	Thesis	17
	234	684	Philosophy of Education	15
	141	570	Elementary School Supervision I	15
28:	250	650	Advanced Laboratory Practice	15
20:	214	614	Advanced Educational Psychology	13
21:	231	624	School and Community Relations	12
	237	679	School Finance	12
	243	632	Curriculum of Elementary School Child.	10
	181	555	Educational Evaluation	8
	235	675	Principles of School Administration	7
		558	Mental Tests	6
	185	544	The Exceptional Child	6
20:	286	617	Analysis of the Individual	6
	108	508	Personality Growth of Child	6
21:	182	583	Introduction to Guidance and Counseling	5
	239	585	Pupil Personnel Service	5
	147	538	Remedial Reading	5
94:	145	542	School Laws of Iowa	5
20:	112	512	Mental Hygiene	4
21:	132	574	Materials of Instruction	4
	186	505	The Retarded Child	4
	142	534	Methods in Elementary Science	4
	288	618	Org. and Adm. of Guidance Program	3
	138	584	Educational and Occupational Information	3
	148	550	Parent Education	3
	131	580	Audio-Visual Education	3
	180	525	Statistical Methods in Education	3
	249	681	Seminar in Elementary Education	3
	275	676	Administration of Secondary School	2
	287	619	Techniques of Counseling	2
	241	614	Elementary School Supervision II	2
98:		683	Seminar in Sociology	2
60:	275	670	Art Projects	2
21:	172	562	Prob. in Reading in Secondary School	2
60:	150	417	Advanced Ceramics	2
80:	235	691	Problems in Teaching Arithmetic	2

TABLE XV

COURSES TAKEN BY MAJORS IN
SCHOOL ADMINISTRATION AND SUPERVISION: ELEMENTARY SUPERVISOR

Cr. S	No. C	Cr. Name	Total
21: 294	604	Educational Research	9
299	620	Thesis	9
245	677	Administration of Elementary School	8
20: 214	613	Advanced Educational Psychology	6
21: 141	570	Elementary School Supervision	6
241	614	Elementary School Supervision	6
231	624	School and Community Relations	4
243	632	Curriculum of Elementary School Child	4
28: 250	650	Advanced Laboratory Practice	4
21: 234	684	Philosophy of Education	3
182	583	Introduction to Guidance and Counseling	3
239	585	Pupil Personnel Service	3
147	538	Remedial Reading	3
133	533	Secondary School Workshop	2
148	550	Parent Education	2
132	574	Materials of Instruction	2
186	505	The Retarded Child	2
249	681	Seminar in Elementary Education	2
	610	Field Study	2
188	509	The Physically Handicapped	2
20: 116	516	Psychology of Adolescence	2

TABLE XVI

COURSES TAKEN BY MAJORS IN ELEMENTARY TEACHING

Cr.	No.	Cr. Name	Total
S	Q		
21: 294	604	Educational Research	11
299	620	Thesis	11
234	684	Philosophy of Education	8
20: 214	613	Advanced Educational Psychology	7
21: 243	632	Curriculum of Elementary School Child	6
182	583	Introduction to Guidance and Counseling	5
235	675	Principles of School Administration	4
	558	Mental Tests	4
287	619	Techniques of Counseling	4
185	544	The Exceptional Child	4
241	614	Elementary School Supervision II	4
20: 108	508	Personality Growth of the Child	4
28: 250	650	Advanced Laboratory Practice	4
21: 245	677	Administration of Elementary School	3
187	507	The Gifted Child	3
143	541	Social Studies in Elementary School	3
231	624	School and Community Relations	2
141	570	Elementary School Supervision I	2
20: 286	617	Analysis of the Individual	2
181	555	Educational Evaluation	2
148	550	Parent Education	2
131	580	Audio-Visual Education	2
147	538	Remedial Reading	2
180	525	Statistical Methods in Education	2
	556	Clinical Experience	2
249	681	Seminar in Elementary Education	2
146	536	Reading and Language Arts II	2
145	543	Story Telling	2
20: 112	512	Mental Hygiene	2
100	515	Child Psychology	2
60: 275	670	Art. Projects	2
82: 118	518	Physical Science for the Elementary Grades	2

TABLE XVII

COURSES TAKEN BY MAJORS IN GUIDANCE AND COUNSELING

Cr.	No.	Cr. Name	Total
S	Q		
21: 294	604	Educational Research	17
20: 286	617	Analysis of the Individual	17
138	584	Educational and Occupational Information	16
288	618	Organization and Admin. of Guidance Program	15
182	583	Introduction to Guidance and Counseling	13
287	619	Techniques of Counseling	13
299	620	Thesis	12
214	613	Advanced Educational Psychology	10
21: 234	684	Philosophy of Education	9
	558	Mental Tests	9
275	676	Administration of Secondary Schools	7
181	555	Educational Evaluation	7
28: 250	650	Advanced Laboratory Practice	7
21: 231	624	School and Community Relations	6
235	675	Principles of School Administration	5
20: 112	512	Mental Hygiene	5
21:	556	Clinical Experience	5
245	677	Administration of Elementary School	4
180	525	Statistical Methods in Education	4
20: 108	508	Personality Growth of the Child	4
285	658	Individual Intelligence Tests	3
21: 185	544	The Exceptional Child	3
148	550	Parent Education	3
133	533	Secondary Education Workshop	2
178	568	The Junior High School	2
131	580	Audio-Visual Education	2
186	505	The Retarded Child	2
187	507	The Gifted Child	2
98: 157	575	Minority Group Relations	2

Grade Point Averages.

Tabulation of grade point averages of graduate students attaining the Master's degree produces a rectangular rather than a normal (bell-shaped) distribution, although there is a definite scarcity of students with a graduate grade point average of 3.80 and above. Differences between majors are slight. Table XVIII contains the complete tabulation.

TABLE XVIII

GRADE POINT DISTRIBUTION OF M.A. GRADUATES

Grade Point	Supt.	Sec. Prin.	Elem. Prin.	Elem. Super.	Elem. Teaching	Guidance & Counseling	Total
4.0		1	1	1		1	4
3.9-3.99	1	2	1			1	5
3.8-3.89		2		1	1	2	6
3.7-3.79	1	3	3	2	2	3	14
3.6-3.69	1	3	2	1		3	10
3.5-3.59	2	6	2		1	2	13
3.4-3.49	2	6	2			1	11
3.3-3.39	2	4	3	2	2	1	14
3.2-3.29	3	7		1	4	1	16
3.1-3.19	4	3	3	1		1	12
3.0-3.09	1	3	4		1	1	10
Total	17	40	21	9	11	17	115

Correlations were calculated between (a) Scores on Miller Analogies Test and graduate grade point average, (b) scores on the Miller Analogies Test and undergraduate grade point, and (c) graduate grade point and undergraduate grade point. The following correlations were obtained:

(a) Miller Analogies Test - - - - Graduate Grade Point - - - - .44
(b) Miller Analogies Test - Undergraduate Grade Point - - - - .32
(c) Undergraduate Grade Point - - Graduate Grade Point - - - - .39

The correlations were all positive, but not high, and apparently not too valuable for predictive purposes. The fact that graduate students with very low M.A.T. scores are either refused admission to candidacy or counseled out of graduate work at this institution undoubtedly is a factor in reducing the apparent correlation, and the correlation between M.A.T. scores and grade point averages of all graduate students might be somewhat higher.

Comparisons were made between 117 graduate students admitted to candidacy for the degree and the 115 students granted the master's degree. Table XIX contains the complete information. As would be expected the master's graduates tend to rank higher.

TABLE XIX

CANDIDATES FOR A MASTER'S DEGREE COMPARED WITH STUDENTS WHO HAVE RECEIVED THE MASTER'S DEGREE

Miller Analogies Test	Students admitted to candidacy (117)		M.A. Degree (115)	
(deciles)	%	Cum. %	%	Cum. %
90	10.7	10.7	10.4	10.4
80	7.6	18.3	14	24.4
70	9.4	27.7	12	36.4
60	12.8	40.5	10.4	46.8
50	13.7	54.2	10.4	57.2
40	11.1	65.3	12	69.2
30	15.3	80.6	11.4	80.6
20	15.3	95.9	14	94.6
10	0	95.9	1.7	96.3
0	3.3	99+	3.4	99+
General Professional				
(deciles)	(117)		(115)	
90	13.7	13.7	23.5	23.5
80	16.2	29.9	21.7	45.2
70	9.4	39.3	11.3	56.5
60	12	51.3	10.4	66.9
50	12.8	64.1	11.3	78.2
40	16.3	80.4	8.6	86.8
30	5.9	86.3	4.3	91.1
20	7.6	93.9	3.5	94.6
10	5.1	99	3.5	98.1
0	.8	99.8	1.7	99.8
Grade Point Averages				
	(106)		(115)	
3.9-4.00	3.77	3.77	7.3	7.3
3.8-3.89	2.83	6.6	5.1	12.4
3.7-3.79	6.6	13.2	12.9	25.3
3.6-3.69	7.4	20.6	8.7	34.
3.5-3.59	6.6	27.2	10.6	44.6
3.4-3.49	7.4	34.6	9.7	54.3
3.3-3.39	8.5	43.1	12.9	67.2
3.2-3.29	15	58.1	13.8	81.
3.1-3.19	9.4	67.5	10.2	91.2
3.0-3.09	32.07	99+	8.8	99+

IV. Post-Master's Degree Experiences

Further Graduate Work.

A return-type post card was sent to the last known address of the 115 students receiving the master's degree with a major in the Department of Education and Psychology. Seventy-nine responded, a return of 69%. Of this number, two had received the doctorate, one a second master's degree, 19 had taken further graduate work, and 10 had taken additional undergraduate work. Table XX contains the complete tabulation.

TABLE XX

WORK COMPLETED AFTER RECEIVING THE MASTER'S DEGREE AT IOWA STATE TEACHERS COLLEGE

School	Semester Hours	Area	Degree
University of Colorado	12	Ed. Psy.	
Colorado State College	4	Ed. Admin.	
Colorado College of Ed.	20	Ed. Admin.	
Drake University	3	Sch. Admin.	
Drake University	6	Elem. Ed.	
Drake University	3	- - - - -	
Florida State Univ.	6	Voc. Ed.	
Harvard University	18	Science	
Indiana	30	Guid. and Coun.	
Iowa	6	- - - - -	
Iowa	14	Ed. Supervision	
Iowa	4	Sch. Admin.	
Iowa	37	Sec. Ed.	
Iowa	60	Educ. Psych.	Ph.D. June 1958
Michigan State	11	Guid. and Coun.	
Michigan State	46	Guid. and Coun.	
Montana State			
University of Nebraska	59	Ed. Psy. & Meas.	Ed.D. Jan. 1959
University of Minnesota	4	Guidance	
University of Oregon	5	- - - - -	
San Jose State College			
U. Southern California			
Washington U. at St. Louis	39	Science Admin.	M.A. 1958
University of Wyoming	26	Ed. Admin.	
University of Wyoming	8	Biological Science	
Work not of a graduate nature			
Arkansas State Teachers	3	- - - - -	
Iowa State Teachers	5	Sch. Admin.	
Iowa State Teachers	2		
Iowa State Teachers	2		
Iowa State Teachers			
Iowa State Teachers	2		
Iowa State Teachers	4		
Iowa State Teachers	3		
Iowa State Teachers	2	Guid. and Coun.	
Iowa State Teachers	2	- - - - -	

The Iowa State Teachers College Placement Bureau was asked for information regarding positions actually held by recipients of the master's degree. As can be seen from an examination of Table XXI, the position held does not always correspond to the graduate major. This is perhaps inevitable, but is some cause for concern. It does provide some certification problems, when a graduate on one major seeks certification in another area of specialization. Graduate advisors should probe as deeply as possible into the entire spectrum of an advisee's vocational goals so as to be able to advise realistically.

TABLE XXI

POSITIONS HELD DURING THE 1958-59 SCHOOL YEAR BY IOWA STATE TEACHERS COLLEGE (MASTER'S DEGREE GRADUATES CLASSIFIED BY MAJOR.)

Position Held	Major: Supt.	Sec. Prin.	Elem. Prin.	Elem. Super.	Elem. Teaching	Guidance and Counseling	Total
Superintendent	5	2				1	8
Secondary Principal	4	15				1	20
Elementary Principal	1	2	10	1		1	15
Elementary Super.			1	1	2	1	5
Elementary Teacher	1	1	3		4	1	10
Guidance Counselor						4	4
Secondary Teacher	5	17	2	2	1	4	31
College Teacher		1	3	2		1	7
Foreign Educator					2		2
Student	1		1			2	4
Military Service		1		1			2
Not Teaching		1	1	2	2	1	7
	17	40	21	9	11	17	115

Current Status of Graduate Program in the Dept. of Education and Psychology.

Since the beginning of the graduate program 1025 students have registered for work in the Education and Psychology Department. Of these, 215 have received the M.A. degree. 118 more have been accepted for candidacy in the department. This leaves a total of 792 that have registered for work but have not been accepted for candidacy.

Master's Graduates		Graduate Students Accepted for Candidacy	
40	Secondary Principalship	44	Secondary Principalship
21	Elementary Principalship	21	Elementary Principalship
17	Superintendent	15	Superintendent
9	Elementary Supervision	5	Elementary Supervision
11	Elementary Teaching	14	Elementary Teaching
17	Guidance and Counseling	19	Guidance and Counseling